MB-AA320EMG

Asus EX-A320M-GAMING A320 Expedition AM4 Ryzen AMD A320 chipset Micro-atx Gaming Motherboard

Product Overview

Asus EX-A320M-GAMING A320 Expedition Micro-atx Gaming - with anti-moisture coating + RGB header + Expedition RGB light - 5-Way protection iii (Safeslot, LANGaurd, OVP, Stainless steel backplate, DiGi+ VRM) - for AMD AM4 Ryzen/ 7th gen A-series/ Athlon processors, AMD A320 chipset, 4x SATA6G with raid 0/1/0+1/10, 1x M.2/NGFF type2280 (PCIe or SATA) SSD socket, on-board VGA (when using A-series CPU) with DVi +HDMi out, Realtek ALC887 7.1 audio (with dedicated audio pcb layers + LED trace path + optical s/pdif out) + Realtek RTL8111H gigabit LAN; 1x pci-e 2.0 (4x) + 1x pci-e 2.0 (1x), 4x USB3.0 + 2x USB2.0, support optional serial port add-on cable, 2x PS2 - m-atx - with optional Ryzen cpu - 4x dual channel DDR4-2666 up to 64Gb, 1x pci-e 3.0x16 (@16x) - with optional A-Series / Athlon cpu - 4x dual channel DDR4-2400 up to 64Gb, Radeon R on-board multi-VGA up to 2048mb, 1x pci-e 3.0x16 (@8x)



Specifications

Features:

ASUS Expedition: Ready for non-stop battle
ASUS Expedition motherboards are made for non-stop action, engineered with non-stop durability to prevent damage from moisture, corrosion and overvoltages - for immense longevity. We even test them to the limits, with 144 hour of diskless-system tests and extensive checks for compatibility with top games and over 100 gaming peripherals. And for the ultimate audio, Expedition motherboards have Epic gaming audio to provide exhilarating non-stop gaming performance - and the best stability, reliability, and value for you!

Exceptional stability and protection
ASUS Expedition motherboards offer an exclusive package of unbeatable hardware and features to ensure non-stop durability, including an anti-moisture coating, gold-plated PCIe® x16 slot and LAN connector, USBGuard protection for 120%-higher overvoltage toleration, and exclusive 5X Protection III for absolute reliability.

100% protection against moisture and corrosion
This innovative moisture-resistant coating provides 100% motherboard protection, and combats the higher levels of humidity that build up in densely-populated environments, such as internet cafes, libraries and data centers. It even minimizes internal corrosion by preventing the adhesion and migration of moisture - prolonging the life of your Expedition motherboard.

Up to 6X-stronger durability

ASUS Expedition motherboards are equipped with a premium 30-micron-thick gold-plated LAN connector, and a 15-micron-thick gold-plated PCIe x16 port to protect your investment against corrosion, and improving durability and reliability.

120% higher overvoltage protection
Exclusive USBGuard technology detects voltage changes in real time, and has 120%-higher overvoltage tolerances than standard to ensure stable and reliable input voltages - minimizing the risk of damage, and protecting your equipment.

Protect Your Graphics Card Investment
SafeSlot is the PCIe slot reinvented by ASUS and engineered to provide superior retention and shearing resistance. Manufactured in a single step using a new insert-molding process to integrate the slot with fortifying metal support for an inherently stronger slot, which is then firmly anchored to the PCB through additional solder points.

Water pump header
EX-A320M-GAMING motherboard has an integrated water-pump header that offers full control over either PWM or DC water pumps, so it's perfect for ready-made, self-contained or custom cooling setups. The header supports a maximum current of up to 3A, so you can equip any popular water-cooling solution - enabling you to dissipate heat far more efficiently than with a traditional air-cooled system!

5X Protection III
ASUS EXPEDITION motherboards are engineered with industry-leading 5X Protection III, employing the finest components, excellent circuit design, and exacting standards to guarantee the quality and long-term durability of your motherboard. That means exceptional protection and stability for your build - thanks to decades of engineering experience from the world's leading motherboard brand.

Fortified PCIe slot prevents damage
SafeSlot Core is the ASUS-exclusive PCIe slot. Featuring a fortified design that's anchored to the motherboard by a special hook, Safeslot Core provides 1.6x stronger retention and 1.3x greater shearing resistance than standard expansion slots.

Pumped-up throughput. 2.5X higher surge tolerance.
ASUS LANGuard is hardware-level networking protection that employs signal-coupling technology and premium anti-EMI surface-mounted capacitors ensuring a more reliable connection and better throughput, plus electrostatically-guarded and surge-protected components for greater tolerance to static electricity and improved protection against surges.

Overvoltage Protection
An exclusive circuit design with built-in voltage regulators to protect your chipset, connectivity ports, and audio codecs from damage caused by unexpected high-level voltages from unstable or inferior power supplies.

DIGI+ Voltage-Regulator Module
The ASUS-exclusive Digi+ VRM intelligently delivers power to the processor based on real-time demands, reducing energy waste and improving system stability.

Stainless-Steel Back I/O
Corrosion-resistant stainless steel back I/O panels bonded with chromium oxide have a lifespan that's three times (3X) longer than ordinary panels.

Acclaimed UEFI BIOS
The smoothest, slickest mouse-controlled graphical BIOS has been improved to make it even more appealing. Whether you're a PC novice or a seasoned overclocker, the EZ and Advanced Modes help you find your way, quickly and easily.

ASUS Beyond VR Ready Perfect for iCafe Owners Wanting to Expand
Beat the competition by offering a VR experience in your iCafe with ASUS Beyond VR Ready. ASUS Expedition motherboards, plus the right mix of class-leading ASUS components, are the perfect solution for delivering the best VR

experiences to your customers. ASUS Expedition motherboards passed the 3DMark VR test and further ASUS VR tests without any faults, so you can feel confident that you're offering the best performance and reliability. Expand your businesses appeal, and take your iCafe into the age of VR computing - with ASUS Beyond VR Ready!

Audio shielding
Ensures precision analog/digital separation and greatly reduced multi-lateral interference.

Separate layer for left and right tracks
Ensures both channels deliver consistent, equal quality.

De-pop circuit
Reduces start-up popping noise to all audio outputs.

Premium Japanese-made audio capacitors
Provides warm, natural, and immersive sound with exceptional clarity and fidelity.

144-hr diskless solution compatibility
ASUS operates the iCafé Labs to certify Expedition motherboards for use as diskless systems, subjecting them to 144 hours of dedicated tests, including a 24-hour reboot test and 12-hour 3D Mark test with heavy loading. A total of 1,200 validation hours ensure that Expedition motherboards are ready to run non-stop - with the smooth performance you demand.

Top games and 100+ peripherals tested
ASUS iCafé Labs engineers also subject Expedition boards to lengthy stability tests in an environment that simulates a real-world internet café. We test with the top games, and with over 100 of the most popular hardware combinations, so both you and your customers are assured of the very best gaming experiences!

144-HOUR DISKLESS TEST
24-hour reboot and 12-hour 3D Mark tests to ensure the best internet and graphics performance.

TOP GAMES COMPATIBILITY
Certified for best gaming experience.

100+ GAMING PHERIPHELS
Certified for best gaming device compatibility.

1000+ COMPATIBLE DEVICES
Including CPUs, memory modules, graphics cards and more.

DDR4 COMPATIBILITY
More flexibility, more compatibility - support for DDR4.

7000+ VALIDATION HOURS
Extensive testing for extreme reliability, compatibility and safety.

AMD CPU and chipset features
This motherboard supports AMD® Ryzen™ processors, 7th Generation A-series accelerated processing units (APUs) and Athlon™ CPUs. The high-performance Ryzen™ processor supports up to eight cores, and is based on the innovative Zen core architecture . The 7th Generation A-series APUs feature integrated AMD Radeon R-series graphics. AMD AM4-socket processors feature dual-channel DDR4 memory, native 5Gbps USB 3.0 and 16 PCI Express® 3.0/2.0 lanes for superb performance.

AMD Socket AM4 A320

The AMD A320 chipset delivers outstanding overclocking capabilities for the latest AMD® AM4-socket Ryzen™ processors, 7th Generation A-series APUs and Athlon™ CPUs. It provides two USB 3.0 ports, and four 6Gbps SATA ports for faster data retrieval.

Specifications:

© 2017 Respective owners and brand holders. This table has been carefully researched and generated by ComXpert International CC (http://www.comx.co.za), however, errors and omissions may occur. Only references to South Africa apply. All products are sourced in South Africa from the official suppliers and the warranty is that of the local supplier. E&OE. This table and our site's content may be used on condition that this notice and link remains intact and unaltered.

Specifications	
Product Code	MB-AA320EMG
CPU	AMD AM4 Socket for AMD Ryzen /7 Generation A-series/Athlon Processors
	Supports CPU up to 8 cores
	* Refer to for CPU support list
Chipset	AMD A320
Memory	AMD Ryzen Processors
	4 x DIMM, Max. 64GB, DDR4 2666/2400/2133 MHz ECC, Non-ECC, Un-buffered Memory
	AMD Ryzen /7th Generation A-series/Athlon Processors
	4 x DIMM, Max. 64GB, DDR4 2400/2133 MHz ECC, Non-ECC, Un-buffered Memory
	* Refer to for the Memory QVL (Qualified Vendors Lists).
Graphic	Integrated Graphics Processor
	Multi-VGA output support : HDMI/DVI-D ports
	- Supports HDMI with max. resolution 4096 x 2160 @ 24 Hz
	- Supports DVI-D with max. resolution 1920 x 1200 @ 60 Hz
	Maximum shared memory of 2048 MB
Expansion Slots	AMD Ryzen Processors
	1 x PCIe 3.0/2.0 x16 (x16 mode)
	AMD 7th Generation A-series/Athlon Processors
	1 x PCIe 3.0/2.0 x16 (x8 mode)
	AMD A320 chipset
	1 x PCIe 2.0 x4 (x2 mode)
	1 x PCIe x1
Storage	AMD Ryzen Processors :
	1 x M.2 x4 Socket 3(SATA 6Gb/s & PCI-E Gen3 x4 link)
	AMD 7th Generation A-series/Athlon Processors :
	1 x M.2 Socket 3,
	AMD A320 chipset :
	4 x SATA 6Gb/s port(s)

LAN	Realtek RTL8111H, 1 x Gigabit LAN Controller(s)
Audio	Realtek ALC887 8-Channel High Definition Audio CODEC
	Audio Feature :
	- Audio Shielding: Ensures precision analog/digital separation and greatly reduced multi-lateral interference
	- Dedicated audio PCB layers: Separate layers for left and right channels to guard the quality of the sensitive audio signals
	- Premium Japanese-made audio capacitors: Provide warm, natural and immersive sound with exceptional clarity and fidelity
	- Unique de-pop circuit: Reduces start-up popping noise to audio outputs
USB Ports	AMD A320 chipset :
	6 x USB 3.0 port(s) (4 at back panel, 2 at mid-board)
	AMD A320 chipset :
	6 x USB 2.0 port(s) (2 at back panel, 4 at mid-board)

Special Features	ASUS 5X Protection III :
	- ASUS SafeSlot Core: Fortified PCIe Slot prevents damage
	- ASUS LANGuard: Protects against LAN surges, lightning strikes and static-electricity discharges!
	- ASUS Overvoltage Protection: World-class circuit-protecting power design
	- ASUS Stainless-Steel Back I/O: 3X corrosion-resistance for greater durability!
	- ASUS DIGI+ VRM: 6 Phase digital power design
	Non-stop Durability :
	- Anti-moisture coating - Outstanding protection against moisture and corrosion
	- USBGuard- 120% higher voltage tolerance
	Non-stop Gaming :
	- Dedicated audio PCB layers: Separate layers for left and right channels to guard the quality of the sensitive audio signals
	- Premium Japanese-made audio capacitors: Provide warm, natural and immersive sound with exceptional clarity and fidelity
	- Unique de-pop circuit: Reduces start-up popping noise to audio outputs
	Non-stop Challenger :
	- ASUS iCafe Labs Certified - Top games and 100+ peripherals tested
	AURA :
	- Aura Lighting Control
	- Aura RGB Strip Headers
	- Aura Lighting Effects Synchronization with compatible ASUS ROG devices
	ASUS Q-Design :
	- ASUS Q-Slot
	- ASUS Q-DIMM
	Digi+VRM
Operating System Support	Windows 10 64-bit
Back I/O Ports	1 x PS/2 keyboard (purple)
	1 x PS/2 mouse (green)
	1 x DVI-D
	1 x HDMI
	1 x LAN (RJ45) port(s)
	4 x USB 3.1 Gen 1 (blue)
	2 x USB 2.0
	3 x Audio jack(s)

Internal I/O Ports	1 x AAFP connector
	1 x RGB Header(s)
	1 x USB 3.1 Gen 1 connector(s) support(s) additional 2 USB 3.1 Gen 1 port(s)
	2 x USB 2.0 connector(s) support(s) additional 4 USB 2.0 port(s)
	1 x M.2 Socket 3 with M Key, type 2242/2260/2280/22110 storage devices support (SATA mode & X4 PCIE mode)
	4 x SATA 6Gb/s connector(s)
	1 x CPU Fan connector(s)
	1 x Chassis Fan connector(s)
	1 x AIO_PUMP connector
	1 x 24-pin EATX Power connector(s)
	1 x 8-pin ATX 12V Power connector(s)
	1 x System panel(s)
	1 x Clear CMOS jumper(s)
	1 x 14-1 pin TPM connector
	1 x COM port header
	1 x AIO PUMP Header
Accessories	User's manual
	I/O Shield
	2 x SATA 6Gb/s cable(s)
	1 x M.2 Screw Package
	1 x Supporting DVD
BIOS	128 Mb Flash ROM, UEFI AMI BIOS, PnP, DMI3.0, WfM2.0, SM BIOS 3.0, ACPI 6.1, Multi-language BIOS, ASUS EZ Flash 3, ASUS CrashFree BIOS 3, My Favorites, Last Modified log, F12 PrintScreen, ASUS DRAM SPD (Serial Presence Detect) memory information, F6 Qfan Control
Form Factor	mATX Form Factor
	9.6 inch x 9.6 inch (24.4 cm x 24.4 cm)

Product Information Online

For the latest product information, availability and purchasing details, please visit the product page:

Product page:
https://www.comx-computers.co.za/MB-AA320EMG-Asus-EX-A320M-GAMING-A320-Expedition-AM4-Ryzen-AMD-A320-chipset-Micro-p-174223.php

Images and specifications are provided for reference and are subject to change without notice. E&OE.

Terms of Use: https://www.comx-computers.co.za/terms-of-use.php
Terms of Sale: https://www.comx-computers.co.za/terms-of-sale.php

PDF generated: 2026-11-21 09:11:15.

This PDF was generated automatically and may include content prepared or assisted by automated or AI-based systems. While reasonable care is taken to ensure accuracy, errors or omissions may occur.

For the most current and accurate product information, please refer to the product information available on our website. If any specification or other information differs from information published elsewhere, please confirm the details with us before relying on the information or making a purchasing decision.

If you identify an error or discrepancy, please report it to us so that we may investigate and correct it where necessary.